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EXAMINER

BLACKMAN, ANTHONY J

ART UNIT PAPER NUMBER

2676

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,231

Applicant(s)

NAKANO, MASAKI

Examiner

ANTHONY J BLACKMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 6 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed 6/12/04 have been fully considered but they are not persuasive. Regarding the merits of PARULSKI et al, US Patent No. 5,414,811 applied as a 102 reference, as described by applicant on page 14, under REMARKS sent in with the AMENDMENT of June 21, 2004, "...controlling rapid display of multiple images from a digital image database, and discloses a system which (1) multiple images are displayed on a single screen, (2) an input image is subjected to image quality adjustment processing. However, applicant submits that the PARULSKI '811 patent fails to disclose or suggest at least the following features below. Nowhere is the PARULSKI '811 patent understood to disclose or suggest a system in which plural images, based on subjecting the same input image to plural image quality adjustment processes in accordance with respective plural image quality adjustment values, are displayed on one screen in an arranged state, as disclosed and claimed in the present application.

Examiner respectfully disagrees with applicant that PARULSKI '811 only "...[controls] rapid display of multiple images from a digital image database, and discloses a system which (1) multiple images are displayed on a single screen, (2) an input image is subjected to image quality adjustment processing". First, the plural quality adjustment processes described in REMARKS as well as the image quality adjustment processing as claimed are claimed without 112 first or second paragraph issues, but are just claimed broadly regarding, "...image quality adjustment processes..." that column 6, lines 7-14 describe an image quality processing by a "...frame store and image processing application software through which the digitized image is processed (e.g. enlarged, cropped, subjected to a scene balance correction, etc) to achieve a desired appearance".

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Attaining the “desired appearance” bears similar results to an adjusted quality means. *Applicant admits* (above) that PARULSKI ‘811 discloses “...controlling rapid display of multiple images from a digital image database, and discloses a system which (1) multiple images are displayed on a single screen, (2) an input image is subjected to image quality adjustment processing” on one screen. PARULSKI ‘811 teach the same input image to plural image quality adjustment processes minimally, on column 12, lines 25-37 (the tumor example), with the multiple pictures (a first and second image adjusted from the low-resolution input image (referred to on column 6, lines 26-36) with arranged portions of the images (side-by-side (the tumor example) as well as manipulating/zooming portions of the images and image cropping selected pixel data to define subsets of image data (disclosed on column 9, lines 42-64). Further, arrangement of the input image(s) may be cropped to fit four screen sections. Further still, redundant images may be displayed (i.e., the tumor example on column 12) as a matter of choice by the user with this introduction on column 8, line 59 column 9, line 14, the user may manipulate any of the saved images as desired. Therefore, a single input image may be divided at least twice (as with the quad mode shown with figure 7), cropped/trimmed/fit to size in the screen with two or four images, and the image portions/images are placed in a desired sequence on the screen (this feature bears similar results to the arranged portions if only because applicant failed to provide any detail of how the arrangement takes place beyond simply cropping and fitting the divided images in a single screen arrangement). Accordingly, examiner maintains use of PARULSKI ‘811.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by PARULSKI et al, US Patent No. 5,414,811.

4. As per claim 1, examiner interprets PARULSKI et al to disclose

An image processing apparatus (figure 1) comprising:

multiscreen synthesis means for composing one screen (figures 5-8, column 11, line 16-column 12, line 42)

by executing a trimming process/where “The image is cropped to fit –column 11, line 42” to a part of an input image and arranging plural pieces of that image in the one screen(figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64)

image quality adjustment value storage means for storing image quality adjustment values for plural kinds of image quality adjustment processes (memory access control circuit means figure 3, element 55 and column 7, line 40-column 8, line 9 for the image adjustment);

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of the image quality adjustment values stored in said image quality adjustment value storage means (column 7, lines 11-41 and the means of the memory access

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control circuit means figure 3, element 55 and column 7, line 40-column 8, line 9 for the image adjustment); and

control means for converting an input image into a first image to which an image quality adjustment process is executed by said image quality adjustment process means on the basis of an image quality adjustment value before performing an image quality adjustment operation stored in said image quality adjustment value storage means

(figure 3, element 200 the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and

similarly for converting the input image into a second image to which an image quality adjustment process is executed by said image quality adjustment process means on the basis of an image quality adjustment value for newly performing an adjustment operation (figures 5-8 and column 11, line 34-column 12, line 37), and

then for displaying the converted first and second images on one screen with arranged state by said multiscreen synthesis means (figures 5-8 and column 11, line 34-column 12, line 37).

5. As per claim 2, examiner interprets PARULSKI et al to disclose

an image processing apparatus (figure 1) comprising:

image enlargement and reduction means for enlarging and reducing an input image (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42);

multiscreen synthesis means for composing one screen by arranging plural pieces of the input image reduced by said image enlargement and reduction means figures in the one screen (5-8, column 11, line 16-column 12, line 42);

image quality adjustment value storage means for storing image quality adjustment values for plural kinds of image quality adjustment processes (figures 5-8, column 11, line 16-column 12, line 42);

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of the image quality adjustment values stored in said image quality adjustment value storage means (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42); and

control means for executing an image quality adjustment process to an input image by said image quality adjustment process means on the basis of an image quality adjustment value before performing an image quality adjustment operation stored in said image quality adjustment value storage means and converting the input image into a first image which was reduced by said image enlargement and reduction means (figure 3, element 200 the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and

similarly for executing an image quality adjustment process to the input image by said image quality adjustment process means on the basis of an image quality adjustment value for newly performing an adjustment operation and converting the input image

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into a second image which was reduced by said image enlargement and reduction means (figures 5-8, column 11, line 16-column 12, line 42), and

then for displaying the converted first and second images on one screen with an arranged state by said multiscreen synthesis means figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

6. As per claim 3, examiner interprets PASRULSKI et al to disclose

An image processing apparatus (figure 1) comprising: image enlargement and reduction means for enlarging and reducing an input image (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42);

multiscreen synthesis means for composing one screen by executing a trimming process to a part of the image reduced by said image enlargement and reduction means and arranging plural pieces of that image in the one screen (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64);

image quality adjustment value storage means for storing image quality adjustment values for plural kinds of image quality adjustment processes (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line

16-column 12, line 42);

image quality adjustment process means for executing the image quality adjustment processes for plural images on the basis of each of combinations of the image quality adjustment values stored in said image quality adjustment value storage means (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42); and

control means for executing an image quality adjustment process to an input image by said image quality adjustment process means on the basis of an image quality adjustment value before performing an image quality adjustment operation stored in said image quality adjustment value storage means and converting the input image into a first image which was reduced by said image enlargement and reduction means (figure 3, element 200 the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and

similarly executing an image quality adjustment process to the input image by said image quality adjustment process means on the basis of an image quality adjustment value for newly performing an adjustment operation and converting the input image into a second image which was reduced by said image enlargement and reduction means (figures 5-8, column 11, line 16-column 12, line 42), and

then for displaying the converted first and second images on one screen with an arranged state by said multiscreen synthesis means (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

7. As per claim 4, PARULSKI et al meet limitations of claim 1, wherein images which are displayed on one screen with the arranged state by said multiscreen synthesis means are two pieces (figures 5-8, column 11, line 16-column 12, line 42, please note: “multiple images for display are disclosed-column 11, lines 43-44), and the image quality adjustment value before performing the image quality adjustment operation stored in said image quality adjustment value storage means coincides with a value which was previously set at a time of manufacturing (figure 3, element 200 the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and said multiscreen synthesis means displays an image to which the image quality adjustment process was executed on the basis of the value which was previously set at the time of manufacturing (figure 3, element 200 the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33) and an image to which the image quality adjustment process was executed on the basis of the image quality adjustment value for performing the adjustment operation on one screen with the arranged state (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

8. As per claim 5, PARIULSKI et al meets limitations of claim 1, wherein images which are displayed on one screen with the arranged state/”programming capability”-column 2, lines 45-46 by said multiscreen synthesis means are two pieces (figures 5-8, column 11, line 16-column 12, line 42), and the image quality adjustment value before performing the image quality adjustment operation

stored in said image quality adjustment value storage means coincides with a value which was used just before starting the image quality adjustment operation processes (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42); and

said multiscreen synthesis means displays an image to which the image quality adjustment process was executed on the basis of the value which was used just before starting the image quality adjustment operation (figures 5-8, column 11, line 16-column 12, line 42)

and an image to which the image quality adjustment process was executed on the basis of the image quality adjustment value for performing the adjustment operation on one screen with the arranged state/”programming capability”-column 2, lines 45-46 (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

9. As per claim 6, PARIULSKI et al meets limitations of claim 1, wherein images which are displayed with the arranged state/”programming capability”-column 2, lines 45-46 by said multiscreen synthesis means are two pieces (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64), and
any one value can be selected from a value which was previously set at a time of manufacturing or a value which was used just before starting the image quality adjustment operation as the image quality adjustment value before performing the image quality adjustment operation stored in said image quality adjustment value storage means (figure 4 illustrates the “user-operated I/O

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command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42. Note: examiner cites the underlined feature after the emboldened and underlined “or”), and

said multiscreen synthesis means displays (1) any one image from an image to which the image quality adjustment process was executed on the basis of the value which was previously set at the time of manufacturing or an image to which the image quality adjustment process was executed on the basis of the value which was used just before starting the image quality adjustment operation and (2) an image to which the image quality adjustment process was executed on the basis of the image quality adjustment value of performing the adjustment operation on one screen with the arranged state/”programming capability”-column 2, lines 45-46 (figures 5-8, column 11, line 16-column 12, line 42).

10. As per claim 7, PARIULSKI et al meets limitations of claim 1, wherein images which are displayed with the arranged state/”programmed capability-column 2, lines 45-46 by said multiscreen synthesis means are three pieces (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64) and the image quality adjustment values before performing the image quality adjustment operation stored in said image quality adjustment value storage means are two values which were previously set at a time of manufacturing and used just before starting the image quality adjustment operation, and

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said multiscreen synthesis means displays three pieces of an image to which the image quality adjustment process was executed on the basis of the value which was previously set at the time of manufacturing (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42),

an image to which the image quality adjustment process (figures 5-8, column 11, line 16-column 12, line 42) was executed on the basis of the value which was used just before starting the image quality adjustment operation

and an image to which the image quality adjustment process was executed on the basis of the image quality adjustment value the performing the adjustment operation on one screen with the arranged state/”programmed capability-column 2, lines 45-46” (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

11. As per claim 8, PARIULSKI et al meets limitations of claim 1, further comprising operation means for arbitrarily setting a reduction ratio in said image enlargement and reduction

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means (figures 5-8, column 11, line 16-column 12, line 42) and image arrangement or trimming/
where "The image is cropped to fit –column 11, line 42" position in said multiscreen synthesis
means (figures 5-8, column 11, line 16-column 12, line 42 examiner cites the underlined feature).

12. As per claim 9, examiner interprets PARULSKI et al to disclose the following limitations as claimed,

An image processing method (figure 1) comprising:

a multiscreen synthesis step of composing one screen by executing a trimming/where "The image is cropped to fit" (column 11, line 42) process to a part of an input image and arranging plural pieces of that image in the one screen (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64);

an image quality adjustment value storage step of storing image quality adjustment values for plural kinds of image quality adjustment processes (column 7, lines 11-41 and the means of the memory access control circuit means figure 3, element 55 and column 7, line 41-column 8, line 9 for the image adjustment); and

an image quality adjustment process step of executing the image quality adjustment processes for plural images on the basis of each of combinations of the image quality adjustment values stored in said image quality adjustment value storage step (column 7, lines 11-41 and the means of the memory access control circuit means figure 3, element 55 and column 7, line 41-column 8, line 9 for the image adjustment),

wherein an input image is converted into a first image to which an image quality adjustment process is executed in said image quality adjustment process step on the basis of an image

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quality adjustment value before performing an image quality adjustment operation stored in said image quality adjustment value storage step (figure 3, element 200- the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and similarly the input image is converted into a second image to which an image quality adjustment process is executed in said image quality adjustment process step on the basis of an image quality adjustment value for newly performing an adjustment operation (figure 3, element 200- the user operated I/O command unit and column 8, lines 10-20 and 31-37 and column 11, lines 16-33), and

then the converted first and second images are displayed on one screen with the arranged state/"programming capability"-column 2, lines 45-46 in said multiscreen synthesis step (figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

13. As per claim 10, examiner interprets PARULSKI et al to disclose the following limitations as claimed,

An image processing method (figure 1) comprising:

an image enlargement and reduction step of enlarging and reducing an input image (figure 4 illustrates the "user-operated I/O command unit 200" comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42);

a multiscreen synthesis step of composing one screen by arranging plural pieces of the input image reduced in said image enlargement and reduction step in the one screen

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(figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64);
an image quality adjustment value storage step of storing (figure 3, element 55 and column 7, line 41-column 8, line 9) image quality adjustment values for plural kinds of image quality adjustment processes (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42); and
an image quality adjustment process step of executing the image quality adjustment processes for plural images on the basis of each of combinations of the
image quality adjustment values stored in said image quality adjustment value storage step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42),
wherein an image quality adjustment process is executed to an input image in said image quality adjustment process step on the basis of an image quality adjustment value (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42)
before performing an image quality adjustment operation stored in said image quality adjustment value storage step and the input image is converted into a first image which was

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reduced in said image enlargement and reduction step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42), and

similarly an image quality adjustment process is executed to the input image in said image quality adjustment process step on the basis of an image quality adjustment value for newly performing an adjustment operation and the input image is converted into a second image which was reduced in said image enlargement and reduction step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42), and

then the converted first and second images are displayed on one screen with the arranged state in said multiscreen synthesis step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42).

14. As per claim 11, examiner interprets PARULSKI et al to disclose the following limitations as claimed;

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An image processing method (figure 1) comprising:

an image enlargement and reduction step of enlarging and reducing an input image:

illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42);

a multiscreen synthesis step of composing one screen by executing a trimming process/where “The image is cropped to fit”-column 11, line 42

to a part of the image reduced in said image enlargement and reduction step and arranging plural pieces of that image in the one screen (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64);

an image quality adjustment value storage step of storing (figure 3, element 55 and column 7, line 41-column 8, line 9) image quality adjustment values for plural kinds of image quality adjustment processes (column 7, line 41-column 8, line 9); and

an image quality adjustment process step of executing the image quality adjustment processes for plural images on the basis of each of combinations of the image quality adjustment values stored in said image quality adjustment value storage step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines

10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42),

wherein an image quality adjustment process is executed to an input image in said image quality adjustment process step on the basis of an image quality adjustment value (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42),

before performing an image quality adjustment operation stored in said image quality adjustment value storage step and the input image is converted into a first image which was reduced in said image enlargement and reduction step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42), and

similarly an image quality adjustment process is executed to the input image in said image quality adjustment process step on the basis of an image quality adjustment value for **newly performing** an adjustment operation and the input image is converted

into a second image which was reduced in said image enlargement and reduction step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a

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multiscreen means figures 5-8, column 11, line 16-column 12, line 42), and then the converted first and second images are displayed on one screen with the arranged state in said multiscreen synthesis step (figure 4 illustrates the “user-operated I/O command unit 200” comprising above claimed features elements 250,252, 254 and 256 grouped with associated elements 260, 262, 264 and 266 and zooming element 210 from column 8, lines 10-36 and the input image on various stages of a multiscreen means figures 5-8, column 11, line 16-column 12, line 42 and column 9, lines 42-64).

15. As per claim 12, examiner interprets PARULSKI et al to disclose the features of the following claims;

A recording medium having recorded thereon computer readable code for executing an image display program (column 2, lines 40-52 and column 5, line 56-column 6, line 36) for controlling an image processing apparatus (at least figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4),

wherein said program causes the computer to perform the steps of:

converting an input image into a first image to which an image quality adjustment process is executed on the basis of a stored image quality adjustment value before performing an image quality adjustment operation (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4), and

a second image to which an image quality adjustment process is executed on the basis of an image quality adjustment value of newly performing an adjustment operation (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line

9 and figure 4), and executing a trimming/cropped process column 6, line 12-14 to parts of the converted first and second images to display obtained image pieces on one screen with an arranged state (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4 and column 9, lines 42-64).

16. As per claim 13, examiner interprets PARULSKI et al to disclose the following features as claimed;

A recording medium having recorded thereon computer readable code for executing an image display program for controlling an image processing apparatus (column 2, lines 40-52 and column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4),

wherein said program causes the computer to perform the steps of:

executing an image quality adjustment process to an input image on the basis of a stored image quality adjustment value before performing an image quality adjustment operation and converting the input image into a first image which is reduced (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4), and

executing an image quality adjustment process to the input image on the basis of an image quality adjustment value for newly performing an adjustment operation and converting the input image into a second image which is reduced (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4), and displaying the converted first and second images on one screen with an arranged state (column

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5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4 and column 9, lines 42-64).

17. As per claim 14, examiner interprets PARULSKI et al to disclose the following features as claimed;

A recording medium having recorded thereon computer readable code for executing an image display program for controlling an image processing apparatus (column 2, lines 40-52 and column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4),

wherein said program causes the computer to perform the steps of:

executing an image quality adjustment process to an input image on the basis of a stored image quality adjustment value before performing an image quality adjustment operation and converting the input image into a first image which is reduced, and executing an image quality adjustment process to the input image on the basis of an image quality adjustment value for newly performing an adjustment operation and converting the input image into a second image which is reduced (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4), and

executing a trimming process/cropped column 6, lines 12-14 to each part of the converted first and second images to display obtained image pieces on one screen with an arranged state (column 5, line 65-column 6, line 36 and figure 3, elements 50-53 frame stores and column 7, line 50-column 8, line 9 and figure 4 and column 9, lines 42-64).

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached Monday-Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANTHONY J BLACKMAN
Examiner
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